

SEQUENCE LISTING

<110> Nardin, Elizabeth

Moreno, Alberto

<120> UNIVERSAL T-CELL EPITOPES FOR ANTI-MALARIAL VACCINES

<130> 5986/1B615-US1

<140> 09/060,450

<141> 1998-01-21

<150> 60/033,916

<151> 1997-01-21

<160> 11

<170> FastSEQ for Windows Version 3.0

<210> 1

<211> 12

<212> PRT

<213> P. falciparum

<400> 1

Asn Ala Asn Pro Asn Ala Asn Pro Asn Ala Asn Pro

1

5

10

<210> 2

<211> 8

<212> PRT

<213> P. falciparum

<400> 2

Asn Val Asp Pro Asn Ala Asn Pro

1

5

<210> 3

<211> 20

<212> PRT

<213> P. falciparum

<400> 3

Glu Tyr Leu Asn Lys Ile Gln Asn Ser Leu Ser Thr Glu Trp Ser Pro

1

5

10

15

Cys Ser Val Thr

20

<210> 4

<211> 16

<212> PRT

<213> P. falciparum

<400> 4

Asp Pro Asn Ala Asn Pro Asn Val Asp Pro Asn Ala Asn Pro Asn Val

1

5

10

15

<210> 5

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Poly-alanine peptide containing DR 1, 4, 7 and 13 allele specific binding motifs for use as indicator peptide.

<400> 5

Gly Phe Lys Ala Ala Ala Ala Ala Ala
1 5 10

<210> 6

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Poly-alanine peptide containing DR 3 allele specific binding motifs for use as indicator peptides.

<400> 6

Ile Ala Tyr Asp Ala Ala Ala Ala
1 5

<210> 7

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Poly-alanine peptide containing DR 8 allele specific binding motifs for use as indicator peptide.

<400> 7

Gly Tyr Arg Ala Ala Ala Ala Ala Leu
1 5 10

<210> 8

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> UD4 peptide containing DR 4 allele specific binding motifs for use as indicator peptide.

<400> 5

Tyr Pro Lys Phe Val Lys Gln Asn Thr Leu Lys Ala Ala
1 5 10

<210> 9

<211> 36

<212> PRT

<213> Artificial Sequence

<220>

<223> Fusion of Carboxyl Terminus of SEQ ID NO: 4 to Amino Terminus of Seq ID NO: 3, designated T*1

<400> 9

Glu Tyr Leu Asn Lys Ile Gln Asn Ser Leu Ser Thr Glu Trp Ser Pro
1 5 10 15
Cys Ser Val Thr Asp Pro Asn Ala Asn Pro Asn Val Asp Pro Asn Ala
20 25 30

Asn Pro Asn Val

35

<210> 10

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Fusion of Carboxyl Terminus of SEQ ID NO:4 to
Amino Terminus of Seq ID NO: 1, designated-T1B

<400> 10

Asn	Ala	Asn	Pro	Asn	Ala	Asn	Pro	Asn	Ala	Asn	Pro	Asp	Pro	Asn	Ala
1				5				10						15	

Asn	Pro	Asn	Val	Asp	Pro	Asn	Ala	Asn	Pro	Asn	Val
		20						25			

<210> 11

<211> 48

<212> PRT

<213> Artificial Sequence

<220>

<223> Fusion of Amino Terminus of SEQ ID NO: 4 to
Carboxyl Terminus of SEQ ID NO: 3 with Concomitant Fusion of
Carboxyl Terminus of SEQ ID NO:4 to Amino Terminus of Seq ID NO:
1, designated T1BT*

<400> 11

Asn	Ala	Asn	Pro	Asn	Ala	Asn	Pro	Asn	Ala	Asn	Pro	Asp	Pro	Asn	Ala
1				5				10						15	

Asn	Pro	Asn	Val	Asp	Pro	Asn	Ala	Asn	Pro	Asn	Val	Glu	Tyr	Leu	Asn
		20						25					30		

Lys	Ile	Gln	Asn	Ser	Leu	Ser	Thr	Glu	Trp	Ser	Pro	Cys	Ser	Val	Thr
		35					40					45			